

**WHAT IS CLAIMED IS:**

1. A computer system for invoking execution of analytical tasks in sequence, the computer system being programmed to:
  - receive a request to execute an analytical task from a front-end software application;
  - determine that a first additional analytical task needs to be executed before the requested analytical task;
  - invoke execution of the first additional analytical task on a first analytical engine; and
  - use information generated from the execution of the first additional analytical task to invoke execution of the requested analytical task on a second analytical engine.
2. The computer system of claim 1, wherein the computer system is programmed to use information contained within the request in conjunction with predetermined task definition information to determine that the first additional analytical task needs to be executed before the requested analytical task.
3. The computer system of claim 2, wherein the computer system is programmed to use a task name in the request in conjunction with predetermined task definition information to determine that the first additional analytical task needs to be executed before the requested analytical task.
4. The computer system of claim 1, wherein the computer system is further programmed to send a response back to the front-end software application that includes information relating to the execution of the first additional analytical task and the requested analytical task.
5. The computer system of claim 1, wherein the computer system is programmed to:
  - receive a request to execute an analytical task from a front-end software application, the request having input values;
  - select a first set of the input values needed for execution of the first additional analytical task; and

use the first set of selected input values to invoke execution of the first additional analytical task on the first analytical engine.

6. The computer system of claim 5, wherein the computer system is programmed to:  
select a second set of the input values needed for execution of the requested analytical task; and

use information generated from the execution of the first additional analytical task and the second set of selected input values to invoke execution of the requested analytical task on the second analytical engine.

7. The computer system of claim 6, wherein the first and second set of selected input values share a common set of input values.

8. The computer system of claim 1, wherein the first additional analytical task is a key performance indicator (KPI) lookup task, and wherein the first analytical engine is a KPI engine.

9. The computer system of claim 1, wherein the requested analytical task is a prediction task, and wherein the second analytical engine is a prediction engine.

10. The computer system of claim 1, wherein the computer system is programmed to use information contained within the request to select the first analytical engine to be used in executing the first additional analytical task, and to select the second analytical engine to be used in executing the requested analytical task.

11. The computer system of claim 10, wherein the computer system is programmed to use information contained within the request to select a first data store to be used during execution of the first additional analytical task, and to select a second data store to be used during execution of the requested analytical task.

12. The computer system of claim 11, wherein the first analytical engine is a KPI engine, and wherein the first data store is a KPI set.

13. The computer system of claim 11, wherein the second analytical engine is a prediction engine, and wherein the second data store is a data mining model.

14. The computer system of claim 1, wherein the first analytical engine is located externally from the second analytical engine.

15. The computer system of claim 1, wherein the computer system is programmed to:  
determine that a second additional analytical task needs to be executed before the first additional analytical task;

invoke execution of the second additional analytical task on a third analytical engine;  
and

use information generated from the execution of the second additional analytical task to invoke execution of the first additional analytical task on the first analytical engine.

16. The computer system of claim 1, wherein the front-end software application is located externally from the computer system.

17. The computer system of claim 1, wherein the first and second analytical engines are located externally from the computer system.

18. A computer-implemented method for invoking execution of analytical tasks in sequence, the method comprising:

receiving a request to execute an analytical task from a front-end software application;

determining that a first additional analytical task needs to be executed before the requested analytical task;

invoking execution of the first additional analytical task on a first analytical engine;  
and

using information generated from the execution of the first additional analytical task to invoke execution of the requested analytical task on a second analytical engine.

19. The computer-implemented method of claim 18, wherein the method comprises using information contained within the request in conjunction with predetermined task definition information to determine that the first additional analytical task needs to be executed before the requested analytical task.

20. The computer-implemented method of claim 18, wherein the method comprises sending a response back to the front-end software application that includes information relating to the execution of the first additional analytical task and the requested analytical task.

21. The computer-implemented method of claim 18, wherein the first additional analytical task is a key performance indicator (KPI) lookup task, and wherein the first analytical engine is a KPI engine.

22. The computer-implemented method of claim 18, wherein the requested analytical task is a prediction task, and wherein the second analytical engine is a prediction engine.

23. The computer-implemented method of claim 18, wherein the method comprises using information contained within the request to select the first analytical engine to be used in executing the first additional analytical task, and to select the second analytical engine to be used in executing the requested analytical task.

24. The computer-implemented method of claim 18, wherein the first analytical engine is located externally from the second analytical engine.

25. The computer-implemented method of claim 18, wherein the method comprises:  
determining that a second additional analytical task needs to be executed before the first additional analytical task;

invoking execution of the second additional analytical task on a third analytical engine; and

using information generated from the execution of the second additional analytical task to invoke execution of the first additional analytical task on the first analytical engine.

26. A computer-readable medium having computer-executable instructions contained therein for performing a method, the method comprising:

receiving a request to execute an analytical task from a front-end software application;

determining that a first additional analytical task needs to be executed before the requested analytical task;

invoking execution of the first additional analytical task on a first analytical engine; and

using information generated from the execution of the first additional analytical task to invoke execution of the requested analytical task on a second analytical engine.